Add the following new claims:

20. An electro-optical display device comprising a plurality of liquid crystal switching elements which comprise a liquid crystal layer comprising liquid crystal molecules and having a surface for display of an image which is switched under control of an electric field having a component predominantly parallel to said surface, wherein said liquid crystal molecules have a pretilt angle α_o, $0° \leq \alpha_o < 30°$.

21. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o, $0° \leq \alpha_o \leq 25°$.

22. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o, $0° \leq \alpha_o \leq 20°$.

23. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o, $0° \leq \alpha_o \leq 10°$.

24. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o, $0° \leq \alpha_o \leq 5°$.

25. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o, $0° \leq \alpha_o \leq 3°$.

26. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o, $0° \leq \alpha_o \leq 2°$.

27. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o, $0° \leq \alpha_o \leq 1°$.

28. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o, $0° < \alpha_o \leq 20°$.

29. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o, $0° < \alpha_o \leq 10°$.

30. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o, $0° < \alpha_o \leq 5°$.

31. The electro-optical display device of claim 20, ~~24 or 30~~ wherein said liquid crystal molecules have a pretilt angle α_o, $0° < \alpha_o \leq 2°$.

32. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o, $0° < \alpha_o \leq 1°$.

33. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o which is about 5°.

34. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o which is about 1°.

35. The electro-optical display device of claim 20, wherein said liquid crystal molecules have a pretilt angle α_o which is about 0°.

36. An electro-optical display device of claim 20 or 24, wherein said liquid crystal molecules have an orientation angle $ß_o$, $0° < ß_o \leq 90°$.

37. An electro-optical display device of claim 36, wherein $ß_o$ is not 45°.

38. An electro-optical display device of claim 20, 22, 24, 27, 28, 30 or 32 wherein the liquid crystal layer has an untwisted structure in its initial orientation and can be reoriented to a twisted structure by said field component oriented predominantly parallel to the liquid crystal layer.

39. An electro-optical display device of claim 20, 22, 24, 27, 28, 30 or 32 wherein the liquid crystal layer has a twisted structure in its initial orientation which can be untwisted by the field component aligned predominantly parallel to the liquid crystal layer.

40. The electro-optical display device of claim 20, 22, 24, 27, 28, 30 or 32 wherein said liquid crystal switching elements further comprise:

(a) said liquid crystal molecules which are twistable;

(b) a substrate; and

(c) an electrode structure which generates said electric field having a component predominantly parallel to the surface of said liquid crystal layer.

41. The electro-optical display device of claim 40, wherein the initial twist angle ß of the liquid crystal molecules is within 15 degrees of 0°, or within 15 degrees of 90°.

42. The electro-optical display device of claim 40, further comprising:

(d) a polarizer in optical relation with said liquid crystal layer; and

(e) a voltage source or a current source connected to said electrode structure.

43. The electro-optical display device of claim 40, further comprising:

(d) a polarizer in optical relation with said liquid crystal layer; and

(e) a voltage source connected to said electrode structure.

44. The electro-optical display device of claim 43, further comprising:

(f) an orientation layer, in contact with at least one surface of said liquid crystal layer, which aligns the liquid crystal molecules in a direction whereby they have an orientation angle $ß_o$, $0° < ß_o < 90°$.

45. The electro-optical display device of claim 44, comprising an orientation layer, in contact with at least one surface of said liquid crystal layer, which aligns the liquid crystal molecules in a direction whereby they have said pretilt angle α_o, $0° \leq \alpha_o < 30°$.

7 46. The electro-optical display device of claim 20, wherein said liquid crystal layer is nematic.

8 47. The electro-optical display device of claim 42, further comprising an analyzer in optical relation with said polarizer.

9 48. The electro-optical display device of claim 20, wherein $\Delta n \cdot d/\lambda$ of the liquid crystal layer is larger than zero but smaller than four.

10 49. The electro-optical display device of claim 40, wherein the axes of switching-effective twisting of the liquid crystal molecules are substantially perpendicular to the plane of the substrate.

11 50. The electro-optical display device of claim 40, wherein, within the image spot of the liquid crystal switching element, said electrode structure is formed between the substrate and the liquid crystal layer and has at least one pair of electrodes with a space therebetween.

12 51. The electro-optical display device of claim 50, wherein each pair of electrodes comprises strip- or line-type electrodes which extend to make a space between said pair of electrodes.

13 52. The electro-optical display device of claim 51, wherein the electrodes intermesh in comb fashion.

14 53. The electro-optical display device of claim 50, wherein the space between the pair of electrodes is 2 μm to 50 μm.

15 54. The electro-optical display device of claim 50, wherein the applied voltage between the pair of electrodes is one volt to 80 volts.

16 55. The electro-optical display device of claim 40, wherein the thickness of the liquid crystal layer is 1 μm to 10 μm.

17 56. The electro-optical display device of claim 40, wherein the area of the image spots of the liquid crystal switching elements is 10 μm^2 to 1 mm^2.

18 57. The electro-optical display device of claim 40, wherein the plurality of liquid crystal switching elements are arranged in the form of a matrix.

19 58. The electro-optical display device of claim 57, wherein said matrix is an active matrix.

20 59. The electro-optical display device of claim 20, wherein the plurality of liquid crystal switching elements are addressed by the time multiplex method.

21 60. The electro-optical display device of claim 59, wherein the switching elements are used to alter the brightness and/or color of a pixel of the electro-optical display device.

22 61. The electro-optical display device of claim 58, wherein the active matrix is a transistor matrix.

23 62. The electro-optical display device of claim 40, wherein the electrode structure is located in one plane.

63. The electro-optical display device of claim 40, wherein the electrode structure is arranged alternately in at least two different planes in parallel with the substrate.

25 64. The electro-optical display device of claim 63, wherein the electrode structure is located between one substrate and the liquid crystal layer.

26 65. The electro-optical display device of claim 64, wherein said at least two planes are located between the liquid-crystal layer and a substrate.

27 66. The electro-optical display device of claim 65, wherein said two planes of the alternating electrodes are formed by the two opposite surfaces of a thin layer.

28 67. The electro-optical display device of claim 66, wherein said thin layer is an insulating film.

29 68. The electro-optical display device of claim 40, wherein the liquid-crystal switching elements ~~comprise~~ constitute a multiplicity of pixels.

30 69. The electro-optical display device of claim 47, wherein the angle between the direction of the initial orientation of the liquid crystal molecules at the surface of the liquid crystal layer on the side of the polarizer and the light transmitting direction of the polarizer is approximately 0°, and the angle between the light transmitting direction of said polarizer and the light transmitting direction of the analyzer is approximately 0° or approximately 90°.

31 70. The electro-optical display device of claim 47, wherein the angle between the direction of the initial orientation of the liquid crystal molecules at the surface of the liquid crystal layer on the side of the polarizer and the light transmitting direction of the polarizer is approximately 90°, and the angle between the light transmitting direction of said polarizer and the light transmitting direction of the analyzer is approximately 0° or approximately 90°.

32 71. The electro-optical display device of claim 20 further comprising a polarizer in optical relation with the liquid-crystal layer.

33 72. The electro-optical display device of claim 71, comprising an analyzer in optical relation with the liquid-crystal layer.

34 73. The electro-optical display device of claim 20, wherein the liquid crystal layer contains a dichroic dye.

35 74. The electro-optical display device of claim 20 further comprising a current or voltage source.

36 75. The electro-optical display device of claim 20 further comprising a voltage source.

37 76. The electro-optical display device of claim 20 which is driven by a matrix of active switching elements.

38 77. The electro-optical display device of claim 58, wherein the switching elements of the active matrix are thin-film transistors.

39 78. The electro-optical display device of claim 20, wherein the switching elements are provided with optical compensation.

40 79. The electro-optical display device of claim 20, wherein the switching elements comprise a birefringent optical compensator in optical correlation with the liquid-crystal layer.

41 80. The electro-optical display device of claim 20, wherein said liquid crystal layer comprises a polymer.

42 81. The electro-optical display device of claim 36, wherein β_0 is not about 40° and not about 50°.

43 82. The electro-optical display device of claim 20 which is driven by a direct triggering device.

83. The electro-optical display device of claim 20 which is directly driven according to the time multiplex method.

84. An electro-optical display device comprising a liquid crystal layer comprising liquid crystal molecules and having a surface for display of an image which is switched under control of an electric field having a component predominantly parallel to said surface, wherein said liquid crystal molecules are in homogeneous alignment and have a pretilt angle α_0 and an orientation angle β_0 which prevent domain formation in said image and/or which impart to said image a small viewing angle dependence and a correspondingly improved image contrast.

85. An electro-optical display device comprising a liquid crystal layer comprising liquid crystal molecules and having a surface for display of an image which is switched under control of an electric field having a component predominantly parallel to said surface, wherein said liquid crystal molecules are in homogeneous alignment and have a pretilt angle α_0 and an orientation angle β_0 which reduce domain formation in said image and/or which impart to said image a small viewing angle dependence and a correspondingly improved image contrast.

86. An electro-optical display device of claim 85, wherein said α_0 and β_0 values impart to said image a small dependence of transmission on viewing angle which when graphed as a curve according to Figure 8 at a given observation angle is more symmetric about the graph's center point than the corresponding curve of Figure 8.

87. An electro-optical display device of claim 85, wherein said α_0 and β_0 values impart to said image a small dependence of transmission on viewing angle which when graphed as a curve according to Figure 7 at a given observation angle has a degree of symmetry about the graph's center point closer to that of the corresponding curve of Figure 7 than of Figure 8.

88. An electro-optical display device of claim 85, wherein said α_o and β_o values impart to said image a small viewing angle dependence wherein the variation of the degree of light transmission (1-fmin/fmax) is, over all ϕ values, below about 0.57 when Θ is up to 45°.

89. An electro-optical display device comprising a liquid crystal layer comprising liquid crystal molecules and having a surface for display of an image which is switched under control of an electric field having a component predominantly parallel to said surface, wherein said liquid crystal molecules are in homogeneous alignment and said device has an initial state configuration in the absence of electric field which during operation reduces domain formation in said image and/or which imparts to said image a small viewing angle dependence and a correspondingly improved image contrast.

90. A liquid crystal switching element comprising a liquid crystal layer comprising liquid crystal molecules and having a surface for display of an image which is switched under control of an electric field having a component predominantly parallel to said surface, wherein said liquid crystal molecules have a pretilt angle α_o, $0° \leq \alpha_o < 30°$.

91. The electro-optical display device of claim 86, 87 or 88, wherein said liquid crystal layer has a negative dielectric anisotropy and $0° < \beta_o \leq 20°$.

92. The electro-optical display device of claim 86, 87 or 88, wherein said liquid crystal layer has a positive dielectric anisotropy and $70° \leq \beta_o < 90°$.

93. A method of viewing the image of an electro-optical display device from different viewing angles in the range Θ = 10° - 60° and observing a small dependence of image contrast on viewing angle in said range, comprising viewing at different angles Θ in said range the image of the electro-optical display device of claim 20, 85, 86, 87, 88 or 89.